

Date: Monday, 4/24/2006 10:25:52 AM  
 User: Kim Johnston

## Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: RIGHT ARM WELDMENT
Job Number	: 26768		
Estimate Number	: 11876		
P.O. Number	: N/A	Part Number	: D33547
This Issue	: 4/24/2006 S.O. No. : N/A	Drawing Number	: D3354 REV.A
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: N/A Type : MACHINED PARTS	Drawing Revision	: A
Previous Run	: N/A	Material	: N/A
Written By	: <i>See comment below</i>	Due Date	: 5/30/2006 Qty: 8 Um: Each
Checked & Approved By	: <i>06.04.24</i>		
Comment	: est rev. A 06.01.14 new issue EC		

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

1.0	M1010B1000X02000	1010-1025 Steel Bar
-----	------------------	---------------------



Comment: Qty.: 0.5597 f(s)/Unit Total : 4.4772 f(s)

1010-1025 BAR

AISI 1010-1025 Steel bar 2.00" x 1.00"

Batch: *M7731**ml 06/05/19**8*

2.0	BAND SAW	BAND SAW
-----	----------	----------



Comment: BAND SAW

Cut blanks 6.32" long

*ml 06/05/19**8*

3.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
-----	-------	--------------------------------



Comment: HAAS CNC VERTICAL MACHINING #1

1-Machine as per Folio FA611 and Dwg D3353

2- Debur

*ml 06/05/19**8*

4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
-----	-----	--



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

*ml 06/05/19**8*

5.0	QC8	SECOND CHECK
-----	-----	--------------



Comment: SECOND CHECK

*J.F. 06/05/21**8*

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: DD Date: 06/05/24  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Date: Monday, 4/24/2006 10:25:52 AM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: RIGHT ARM WELDMENT

Job Number: 26768

Part Number: D33547

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

PACKAGING 1

PACKAGING RESOURCE #1



57428

10/15/23



(8)

Comment: PACKAGING RESOURCE #1

Job Completion



Level 2 inspection

06/05/24

DD 06/05/24 (8)

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

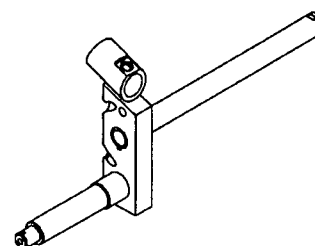
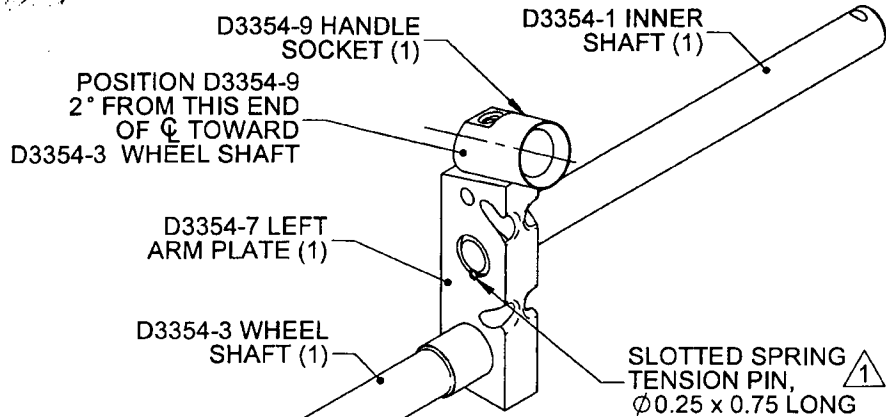
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



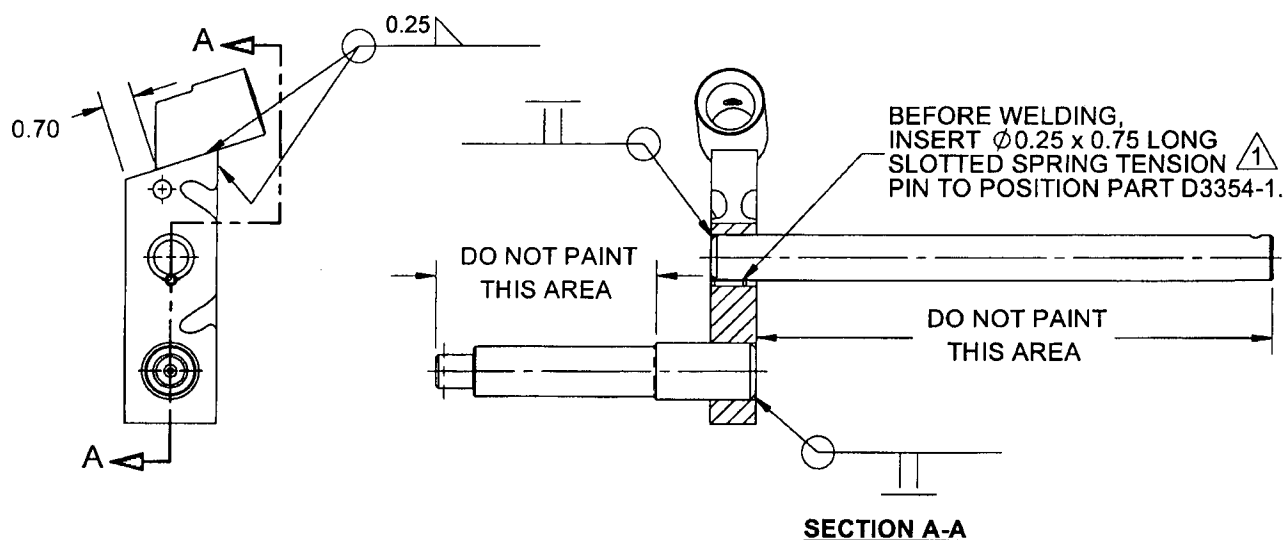
DESIGN RF	DRAWN BY RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. <b>D3354</b>	REV. A SHEET 1 OF 7
DATE <b>04.12.13</b>	TITLE <b>LEFT ARM WELDMENT</b>		SCALE 1:4
A	04.12.13	NEW ISSUE	

RELEASED  
86/02/07



**D3354-042 MIRROR  
ARM WELDMENT**

**D3354-041 LEFT ARM WELDMENT**



**NOTES:**

- 1) POSSIBLE SUPPLIER: SPAENAU, P/N TP-134
- 2) WELD PER DART QSI 004
- 3) FINISH: POWDER COAT PAINT FIRE RED (4.3.5.10) PER DART QSI 005 4.3
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) BREAK ALL SHARP EDGES 0.010 TO 0.020

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO 26768

**COPYRIGHT © 2004 BY DART AEROSPACE LTD.**

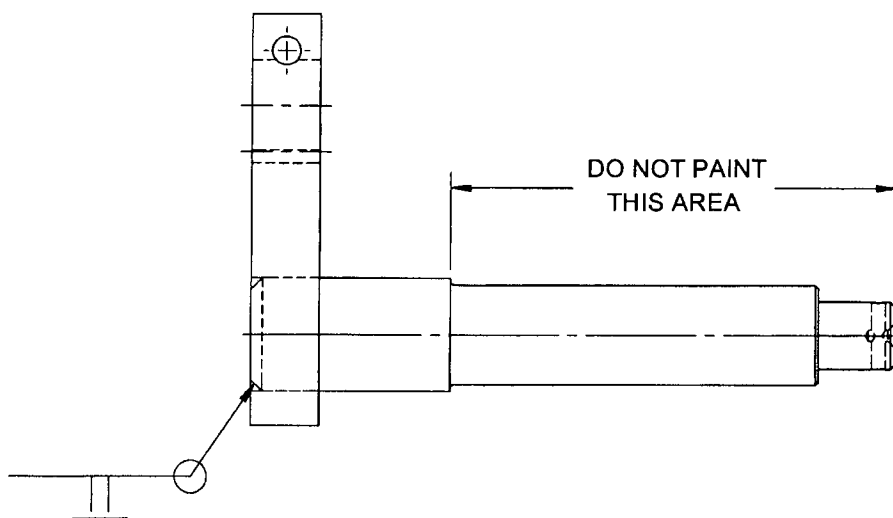
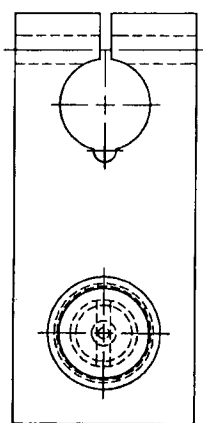
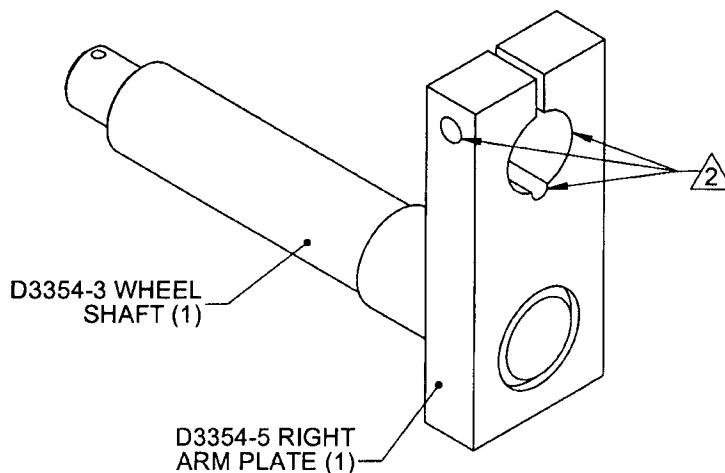
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

**DART**

DESIGN RF	DRAWN BY RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. <b>D3354</b>	REV. A SHEET 2 OF 7
DATE <b>04.12.13</b>	TITLE <b>LEFT ARM WELDMENT</b>		SCALE 1:2

**RELEASED**  
06/03/19

[Signature]

**D3354-043 RIGHT ARM WELDMENT****NOTES:**

- 1) WELD PER DART QSI 004
- 2) COVER INSIDE HOLES PRIOR PAINTING
- 3) FINISH: POWDER COAT PAINT FIRE RED (4.3.5.10) PER DART QSI 005 4.3
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) BREAK ALL SHARP EDGES 0.010 TO 0.020

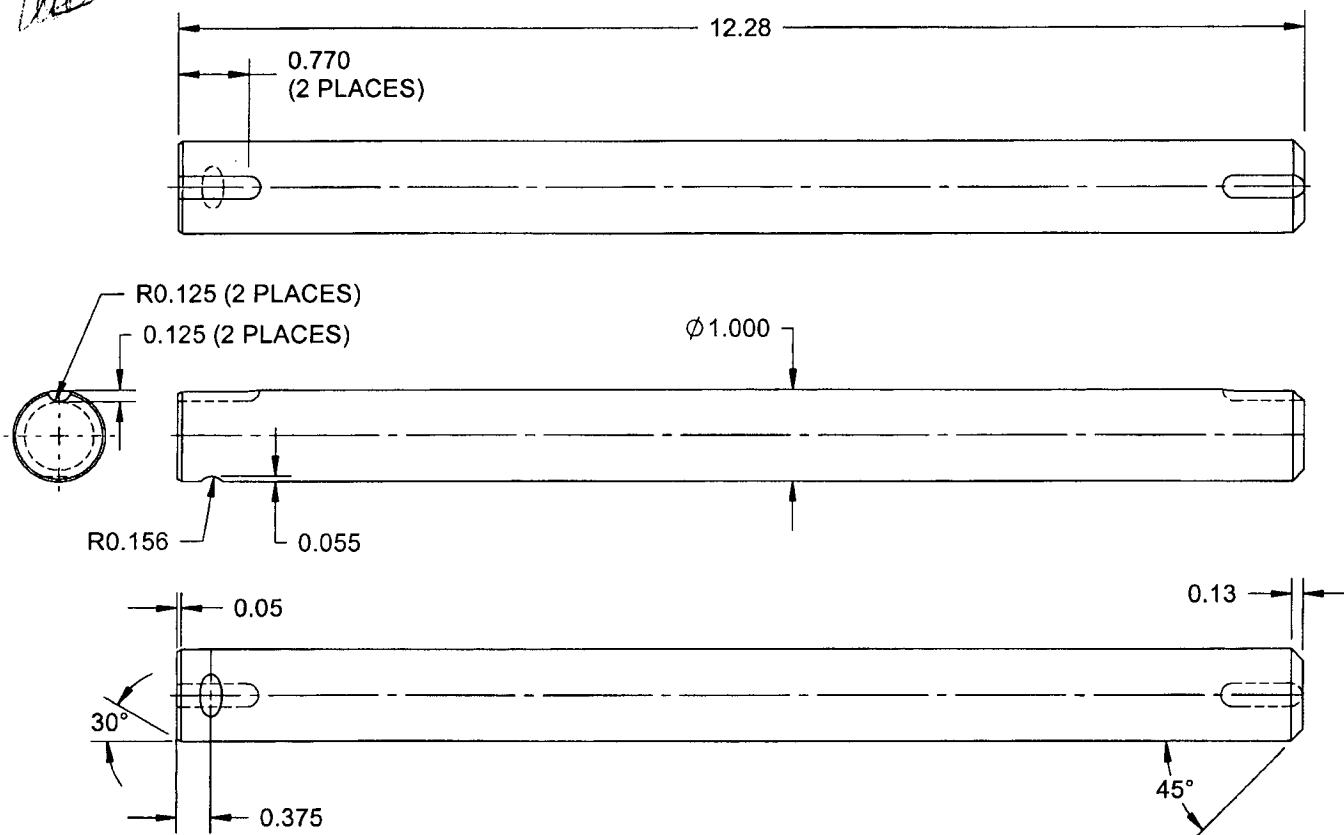
SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. **26768**

**COPYRIGHT © 2004 BY DART AEROSPACE LTD.**

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

**DART**

DESIGN RF	DRAWN BY RE	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. <b>D3354</b>	REV. A SHEET 3 OF 7
DATE <b>04.12.13</b>	TITLE <b>LEFT ARM WELDMENT</b>		SCALE 1:2

**RELEASED**  
06/03/07**D3354-1 INNER SHAFT****NOTES:**

- 1) MATERIAL: AISI-4140 OR ASTM A304-02/ A-434-BC/ A193-03 - GRADE-B7/ A29-03/ A322-04 OR UNS#-G41400 ROUND BAR,  $\phi 1.250$  (REF. DART SPEC. M4140H.R)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010

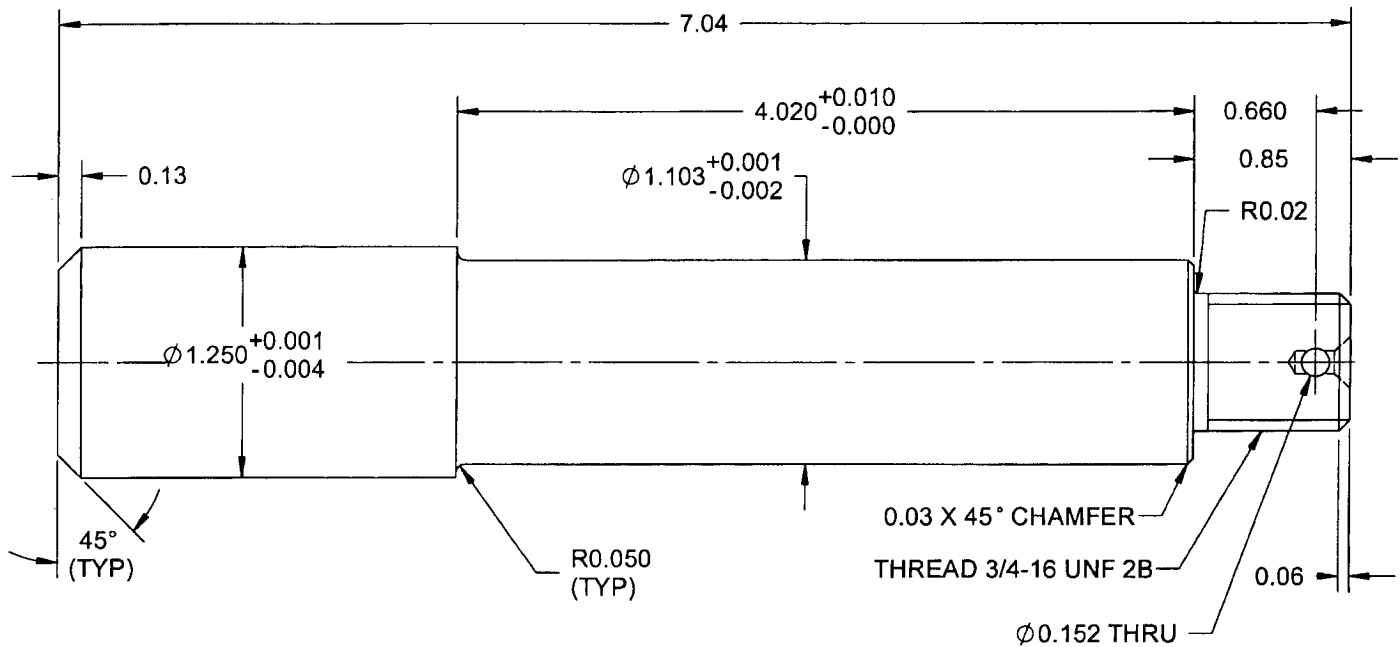
SHOP COPY  
RETURN TO  
DART AEROSPACE LTD  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 26768

**COPYRIGHT © 2004 BY DART AEROSPACE LTD.**

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

**DART**

DESIGN RF	DRAWN BY RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. <b>D3354</b>	REV. A SHEET 4 OF 7
DATE <b>04.12.13</b>	TITLE <b>LEFT ARM WELDMENT</b>		SCALE 1:1

**RELEASED**  
*[Signature]***D3354-3 WHEEL SHAFT****NOTES:**

- 1) MATERIAL: AISI-4130/ AISI-4140 OR ASTM A304-02/ A-434-BC/ A193-03 - GRADE-B7/ A29-03/ A322-91 OR UNS#-G41400 ROUND BAR,  $\phi 1.250$  (REF. DART SPEC. M4140H-R)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.020

SHOP COPY  
RETURN TO  
ENGINEERING  
CONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. **26768**

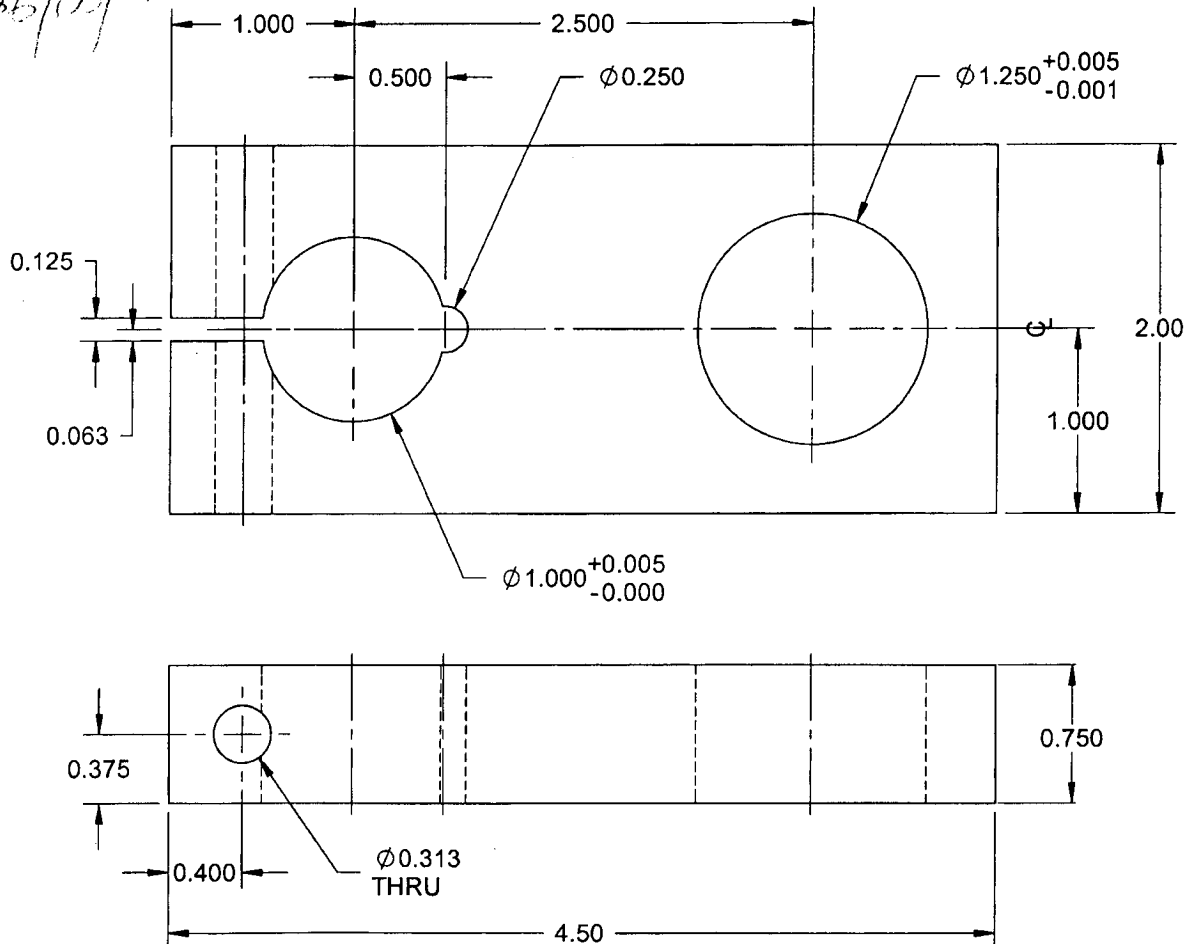
**COPYRIGHT © 2004 BY DART AEROSPACE LTD.**

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



**DART**

DESIGN RF	DRAWN BY RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED 13	APPROVED	DRAWING NO. <b>D3354</b>	REV. A SHEET 5 OF 7
DATE <b>04.12.13</b>		TITLE <b>LEFT ARM WELDMENT</b>	SCALE 1:1

**RELEASED**  
*26/03/14***D3354-5 RIGHT ARM PLATE****NOTES:**

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A569/A570 OR CSA G40.21, 38W/44W/50W/60W/70W, 0.75 THICK MILD STEEL BAR (REF. DART SPEC. M1010-B)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.020

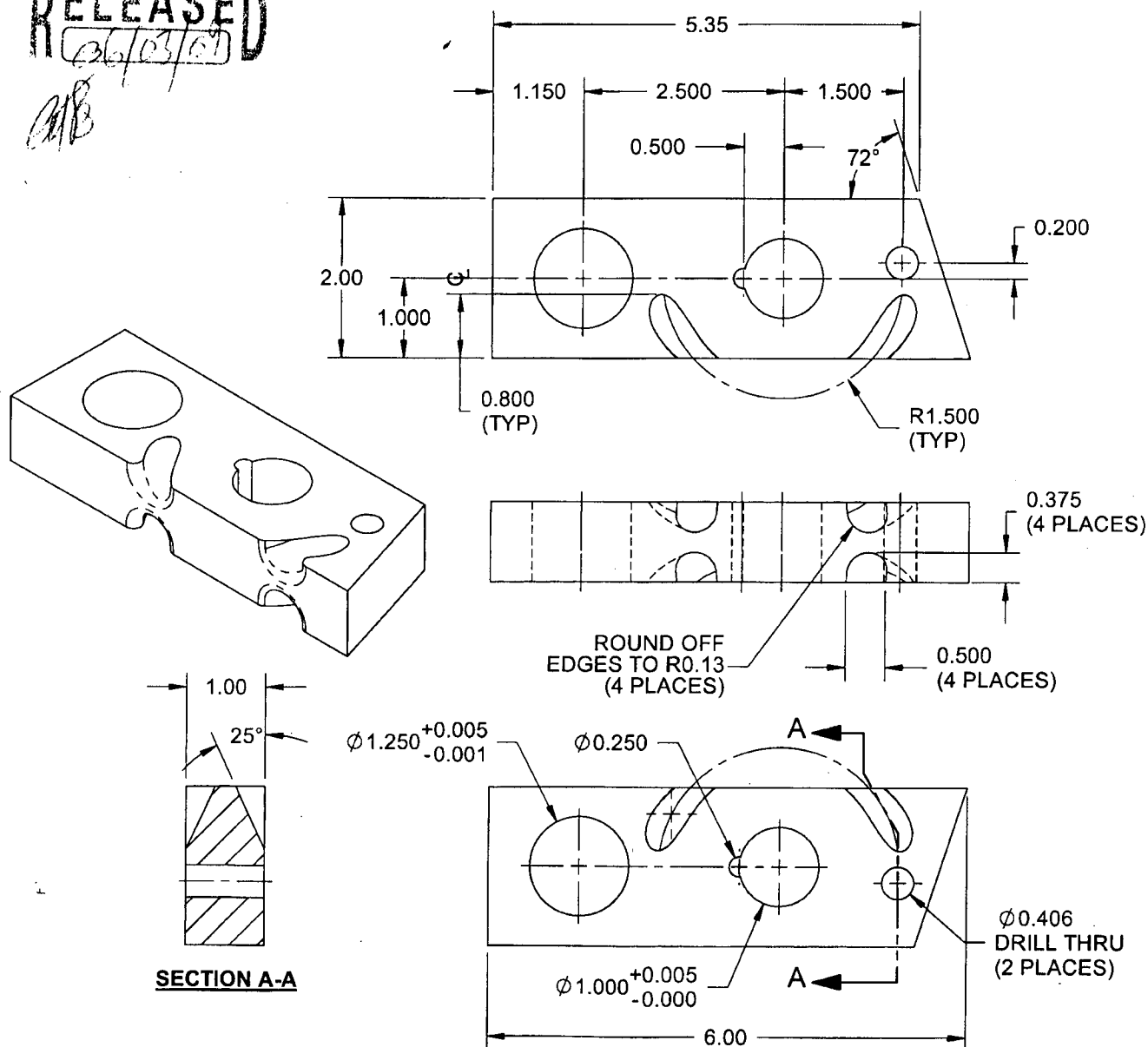
SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. *26768*

**COPYRIGHT © 2004 BY DART AEROSPACE LTD.**

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

**DART**

DESIGN RF	DRAWN BY RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. <b>D3354</b>	REV. A SHEET 6 OF 7
DATE <b>04.12.13</b>	TITLE <b>LEFT ARM WELDMENT</b>		SCALE 1:2

**RELEASED**  
06/03/01**D3354-7 LEFT ARM PLATE****NOTES:**

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A569/A570 OR CSA G40.21, 38W/44W/50W/60W/70W, 1.00 THICK MILD STEEL BAR (REF. DART SPEC. M1010-B)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.020

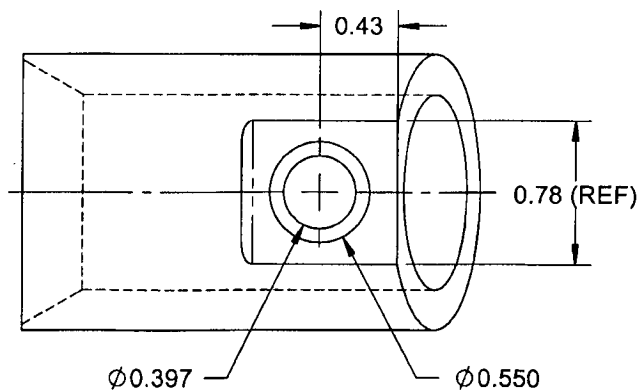
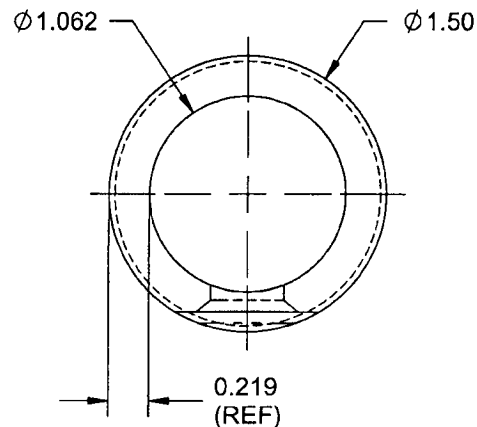
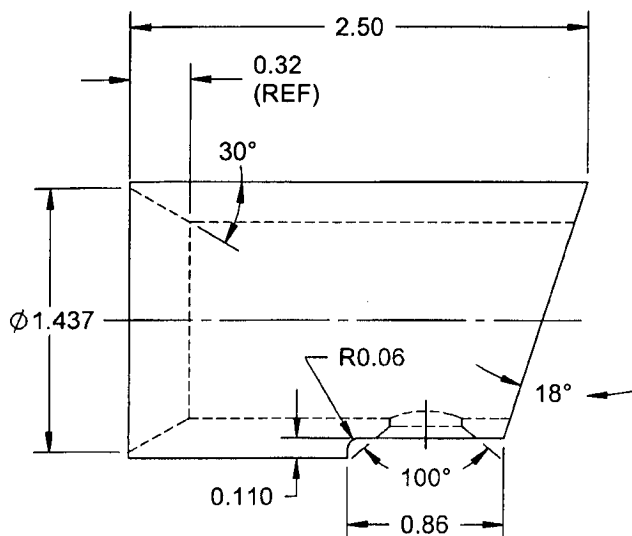
SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER NO. **26768**

**COPYRIGHT © 2004 BY DART AEROSPACE LTD.**

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

**DART**

DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED 15	APPROVED	DRAWING NO. D3354	REV. A SHEET 7 OF 7
DATE 04.12.13		TITLE LEFT ARM WELDMENT	SCALE 1:1

**D3354-9 HANDLE SOCKET****NOTES:**

- 1) MATERIAL: AISI 1010-1025 SEAMLESS ROUND TUBING PER MIL-T-5066 OR ASTM A513-00 MT1020 SRA OR AMS 5075 OR AMS 5077, (REF. DART SPEC. M1020TR1.250W.219)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.020

SHOP COPY  
RETURN TO  
ENGINEERINGCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICEWORK ORDER  
NO. 26768

COPYRIGHT © 2004 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

DART AEROSPACE LTD		Work Order: 26768
Description: LEFT ARM PLATE		Part Number: D3354-7
Inspection Dwg: D3354 Rev: A		Page 1 of 1

### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.00	$\pm 0.036$	1.003	—			
25°	$\pm \frac{1}{2}^\circ$	25°	—			
$\varnothing 1.250$	$\pm 0.005$ $\pm 0.001$	$\varnothing 1.251$	—			
$\varnothing 1.000$	$\pm 0.005$ $\pm 0.002$	$\varnothing 1.003$	—			
6.00	$\pm 0.036$	6.000	—			
$\varnothing 0.406$	$\pm 0.006$ $\pm 0.001$	$\varnothing 0.407$	—			
$\varnothing 0.250$	$\pm 0.005$ $\pm 0.001$	$\varnothing 0.250$	—			
0.500	$\pm 0.010$	0.500	—			
0.375	$\pm 0.010$	0.380	—			
0.200	$\pm 0.005$	0.200	—			
0.800	$\pm 0.010$	0.795	—			
1.000	$\pm 0.010$	0.995	—			
2.00	$\pm 0.036$	2.004	—			
1.150	$\pm 0.010$	1.150	—			
2.500	$\pm 0.005$	2.500	—			
5.35	$\pm 0.036$	5.350	—			

Measured by: <i>Thx</i>	Audited by: <i>J.G</i>	Prototype Approval:
Date: 06/05/19	Date: 06/05/19	Date:

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/RF	

Date: Wednesday, 5/24/2006 12:43:34 PM  
User: Chantal Lavoie

**INVENTORY ITEMS PICKED  
FOR SLIP NUMBER 2497**

Project No. : N/A  
Customer : Dart Helicopters Services  
Part Number : D33547  
Job Number : 26768

Drawing Number : D3354 REV.A  
Drawing Name : RIGHT ARM WELDMENT  
Due Date : / /  
Qty : 8  
Slip # : 2497

		Location	Store	Picking	Lot No.	Serial No.	Req'd	Taken
1.0	M1010B1000X02000							
	1010-1025 Steel Bar							
	Available	19.50	MAIN		7731		4.48	4.4700 f